IN THE CLAIMS

Please amend claims 2, 3, 5-9, 13-15 and 18 as follows:

1. (Original) A method, comprising the step of:

iteratively defining a circuit path between a source node and a destination node in a network comprising a plurality of nodes interconnected by links, where each link has associated with it a respective bandwidth utilization level, and where links having bandwidth utilization levels exceeding a threshold level are not used to define said circuit path.

2. (Currently Amended) The method of claim 1, further comprising the steps of:

determining an ideal shortest path between the source node and destination node;

comparing the ideal shortest path to the iteratively defined circuit path; and

in the case of the ~~said~~ iteratively defined ~~determined~~ circuit path exceeding said ideal shortest path by a threshold amount, adjusting said threshold level and repeating said step of iteratively defining said circuit path.

3. (Currently Amended) The method of claim 2, wherein said iteratively defined circuit path is compared to said ideal shortest ~~circuit~~ path by comparing the number of intervening nodes within each respective circuit path.

4. (Original) The method of claim 3, wherein said threshold amount comprises a predetermined increase in the number of intervening nodes.

5. (Currently Amended) The method of claim 2, wherein said iteratively defined circuit path is compared to said ideal shortest ~~circuit~~ path by comparing the latency within each respective circuit path.

6. (Currently Amended) The method of claim 2, wherein said iteratively defined circuit path is compared to said ideal shortest ~~circuit~~ path by comparing the number of links within each respective circuit path.

7. (Currently Amended) A method, comprising the steps of:

determining a shortest path between a source node and a destination node, said shortest path comprising a plurality of intervening nodes coupled by respective links;

determining whether a respective bandwidth utilization level for each link within said shortest ~~circuit~~ path is below a threshold level; and

adapting said shortest ~~circuit~~ path to avoid using links having respective bandwidth utilization levels above said threshold level.

8. (Currently Amended) The method of claim 7, further comprising the step of:

determining whether a shortest ~~circuit~~ path formed using links having respective bandwidth utilization levels below said threshold level exceeds an ideal shortest ~~circuit~~ path by a threshold amount; and

in the case of said shortest ~~circuit~~ path exceeding said ideal shortest path, adjusting said threshold level ~~levels~~ and recalculating said shortest ~~circuit~~ path.

9. (Currently Amended) The method of claim 8, wherein said calculated shortest ~~circuit~~ path is compared to said ideal shortest ~~circuit~~ path in terms of at least one of a number of nodes within said circuit paths, a latency associated with communications within said circuit paths and a number of links within said circuit paths.

10. (Original) A method, comprising the steps of:

selecting, according to a shortest path algorithm, at least one link within a circuit path between a starting node and a destination node within a network comprising a plurality of nodes;

determining whether each selected link has associated with it a bandwidth utilization level exceeding a threshold level;

rejecting each selected link having associated with it a bandwidth utilization level exceeding said threshold level; and

repeating said steps of selecting and determining until a circuit path between said starting node and said destination node has been determined.

11. (Original) The method of claim 10, further comprising the step of increasing said threshold level in response to said determined circuit path exceeding an ideal circuit path by a predetermined amount.

12. (Original) The method of claim 11, wherein said predetermined amount comprises a difference in at least one of the number of nodes within said circuit paths, the latency associated with communications within said circuit paths and the number of links within said circuit paths.

13. (Currently Amended) The method of claim 10, wherein said step of selecting comprises the step of selecting, according to said shortest path algorithm, each link within a circuit path between a ~~the~~ last node of a partially formed circuit path and said destination node.

14. (Currently Amended) A method for determining a circuit path between a source node and a destination node in a network comprising a plurality of nodes interconnected by links, said method comprising the steps of:

(a) selecting, according to a shortest path algorithm, an available link to a next node within said circuit path;

(b) determining if said selected link has associated with it a bandwidth utilization level below a threshold level;

(c) rejecting said selected link in the case of said respective bandwidth utilization level being below said threshold level; and

(d) repeating steps (a) through (c) until a circuit path between said source ~~starting~~ node and said destination node has been determined.

15. (Currently Amended) The method of claim 14, further comprising the step of:

(e) determining if said circuit path exceeds an ideal circuit path by a predetermined amount; and in the case of said circuit path exceeding said ideal circuit path by said predetermined amount, adjusting said threshold level ~~levels~~ and repeating steps (a) through (d).

16. (Original) The method of claim 15, wherein said predetermined amount comprises a difference in at least one of the number of nodes within said circuit paths, the latency associated with communications within said circuit paths, and the number of links within said circuit paths.

17. (Original) A computer readable medium storing a software program that, when executed by a computer, causes the computer to perform a method comprising:

iteratively defining a circuit path between a source node and a destination node in a network comprising a plurality of nodes interconnected by links, where each link has associated with it a respective bandwidth utilization level, and where links having bandwidth utilization levels exceeding a threshold level are not used to define said circuit path.

18. (Currently Amended) The method of claim 17, further comprising the steps of:

determining an ideal shortest path between the source node and destination node;

comparing the ideal shortest path to the iteratively defined circuit path; and

in the case of the ~~said~~ iteratively defined ~~determined~~ circuit path exceeding said ideal shortest path by a threshold amount, adjusting said threshold level and repeating said step of iteratively defining said circuit path.

19. (Original) Apparatus, comprising:

a network manager, for determining a circuit path between a source node and a destination node within a network comprising a plurality of nodes; and

a data base, for storing a respective bandwidth utilization level for each of a plurality of links interconnecting said nodes;

said network manager determining said circuit path by iteratively selecting appropriate next nodes according to a shortest path algorithm, determining whether a link communicating with said selected next node has associated with it a bandwidth utilization level exceeding a threshold level, and selecting an alternative next node in the case of said link having associated with it a bandwidth utilization level exceeding said threshold level.

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20. (Original) The apparatus of claim 19, wherein:

in the case of a plurality of alternative next nodes having respective links with bandwidth utilization levels above said threshold level, adjusting said threshold level.